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CLAIMS

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Method for manufacture of toroidal transformers,
the method comprising the steps of:

arranging a coil around the periphery of at least one hollow bobbin of elongated shape and of flexible material;

bending said at least one bobbin, together with said coil, so that the bobbin ends are brought towards each other, one of said bobbin ends defining an opening; and

feeding a ribbon of magnetic material through said opening, so that said ribbon is being wound a required amount of tightly packed winding turns inside said bobbin until essentially the whole interior cavity of said bobbin is filled, said ribbon thereby forming a core.

- 2. Method according to claim 1, comprising the additional step of:
- 20 cutting said ribbon at a desired length after having fed said ribbon through said opening.
 - 3. Method according to any one of claims 1 or 2, comprising the additional step of:
- 25 pre-bending said ribbon at the end intended to first be fed through said opening.
 - 4. Method according to any one of claims 1 to 3, comprising the additional step of:
- providing a part of said ribbon first being fed into the bobbin essentially corresponding to the first wound winding inside said bobbin of said ribbon, on the side facing the inner curvature of the interior hollow cavity

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of the bobbin, with a layer having a low coefficient of friction for facilitating sliding of said ribbon while being wound inside said bobbin.

5 S. Method according to claim 4, wherein said layer is provided by at least one of an adhesive tape having a first side with low coefficient of friction and a second side being adhesive, a coating with low coefficient of friction, and a fluid.

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6. Method according to any one of claims 1 to 5, comprising the additional step of:

arranging a flexible transmission element so that it is in continuous co-operation with the innermost winding of said ribbon, further facilitating sliding of said ribbon while being wound inside said bobbin, thus forming the core.

7. Method according to any one of claims 5 or 6, 20 comprising the additional step of:

arranging mediating means in connection to said ribbon for mediating co-operation between said flexible transmission element and said ribbon, said mediating means engaging with said flexible transmission element over a distance corresponding to at least a fraction of the innermost winding inside said bobbin of said ribbon.

8. Method according to claim 7, wherein said mediating means comprises a from said ribbon protruding part of said layer.

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9. Method according to any one of claims 1 to 8, wherein the step of feeding said ribbon of magnetic material through said opening further comprises:

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rotating said bent bobbin together with said coil; and

stopping, essentially instantaneously, the rotation of said bent bobbin together with said coil.

10. Method according to any one of claims 1 to 9, 10 wherein the step of feeding said ribbon of magnetic material through said opening further comprises:

injecting a medium through said opening, thereby creating a variable gap between the outer curvature of the interior of said hollow bobbin, being in a bent position, and said ribbon; and

leading said medium out from said hollow bobbin.

- 11. Method according to any one of claims 1 to 10, wherein said method is performed in a magnetic field.
- 12. Bobbin for manufacture of toroidal transformers, essentially comprising an elongated tube, characterised by:

said elongated tube being made by a flexible material and adapted to be bent, so that the ends of said elongated tube may be brought towards each other, one of said ends of said elongated tube defining an opening; and

said elongated tube having an essentially rectangular interior hollow cross-section.

13. System for manufacture of toroidal transformers, the system comprising:

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means for performing said method for manufacture of toroidal transformers, according to any one of claims 1 to 11.

- 5 14. Toroidal transformer manufactured by said method for manufacture of toroidal transformers, according to any one of claims 1 to 11.
- 15. Use of a toroidal transformer according to claim10 14 in electrical equipment, such as adaptors.